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ABSTRACT

This study investigates environmental knowledge, attitudes, and behavior among adult Americans. The fifth survey, conducted by Roper Starch, explores the relationship between attitudes about the environment and how those attitudes are affected by learning. This report concludes that Americans have very positive views toward the need to conserve environmental resources and, in most cases, see a need to do more to protect and conserve the environment. Sections include: (1) "A Sense of Balance in Environmental Attitudes;" (2) "Increasing Environmental Knowledge: The Concern--Education--Behavior Nexus;" (3) "Renewed Support for Government's Role in Environmental Affairs;" (4) "Case Study: Knowledge of a Specific Environmental Issue--Water;" and (5) "The Views of Outdoor Sports Enthusiasts." The research methodology is explained; an appendix containing a summary of changes and attitudes over time, and data on the environmental gender gap is included. (CCM)

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Report Card: Environmental Attitudes and Knowledge in America

The Fifth Annual Survey of Adult Americans

Prepared For:

**National Environmental Education
and Training Foundation**

December 1996

**R O P E R
S T A R C H**

TURNING DATA INTO INTELLIGENCE WORLDWIDE

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Introduction

This Roper Starch survey was commissioned by the National Environmental Education and Training Foundation to help America's leaders -- educators, policy makers, business executives, media representatives, and members of the public -- better understand what Americans think about environmental conservation and management, and how they view different issues and opportunities to become involved in environmental activities.

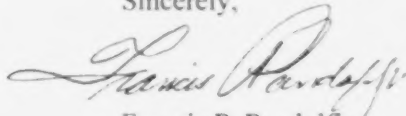
This, the fifth annual survey of adult Americans, explores the relationship between attitudes about the environment and how those attitudes are affected by learning. The survey points out that Americans have very positive views on the need to conserve environmental resources and, in most cases, see a need to do more to protect and conserve the environment, particularly if it can be done in a way that balances economic growth with environmental protection and the protection of human health.

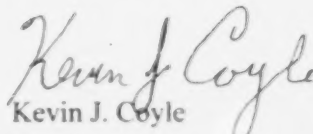
This is the only national environmental survey that contains five continuous years of trend information. While most of the questions in the survey track with previous years and focus on attitudes, the Foundation placed more emphasis on the relationship between public attitudes and knowledge by selecting the issue of water conservation and management for a more in-depth assessment of how much people knew about certain key water issues.

In the future, we expect to make this survey into a national report card on the relationship between environmental attitudes, learning, and individual behavior. It is critical that the field of environmental education, along with business, government, and academia, track and evaluate this relationship.

The National Environmental Education and Training Foundation is pleased to present these findings and make supporting information available to those who can benefit from a greater knowledge of what Americans believe and know about our environmental resources and how they are managed.

Sincerely,


Francis P. Pandolfi
Chairman


Kevin J. Coyle
President

Acknowledgments

The National Environmental Education and Training Foundation is grateful for the expertise and good will of Roper Starch and their long-standing commitment to this project. We are particularly grateful to Times Mirror Magazines, which conducted this survey for each of its first four years and then conveyed it to the Foundation in 1995.

We are also very grateful to our funding supporters who made it possible for the Foundation to undertake and continue this project. These include the Beldon Fund, the George Gund Foundation and the Wallace Genetic Foundation. We also thank Phillips Petroleum for its support and dedication to environmental education.

America's ski resorts also provided major support to the survey this year and we are deeply grateful to them, especially the National Ski Areas Association. Ski resort contributors included: Copper Mountain, Inc.; Fibreboard Resort Group (Northstar-at-Tahoe); Intrawest Resort Operations Group (Blackcomb, Tremblant, Panarama, Stratton and Snowshoe Ski Resorts); Jackson Hole Ski Corporation; Snowbird Ski & Summer Resort; and Vail Associates, Inc.

Report Card: Environmental Attitudes and Knowledge in America

Overview and Highlights

Few issues in recent years have elicited such wide media attention and public introspection as the environment. Over the years, government at the federal, state and local levels has been called upon by concerned Americans to create policies for protecting the environment. In a country as diverse as the United States, some segments of the population naturally feel that regulations go too far one way or another, stifling the economy or allowing wholesale destruction of the environment.

The majority of Americans, though, favor a balance between environmental protection and economic development; this is evident in the shift from calling for a review of the scope of government's role in environmental protection (through the 1994 Congressional elections) to renewed support today for the government's presence in environmental affairs as Americans have become anxious about proposed changes to environmental protection laws.

At the same time, the measures that help shape attitudes toward the environment, such as environmental knowledge and volunteerism on behalf of the environment, are stable over the last few years. Since knowledge and involvement are generally thought to be linked, it becomes clear that further education is necessary for Americans as a whole to become more environmentally responsible. This is especially evident when Americans' knowledge of a specific issue, such as water, is examined in detail.

Report Card: Environmental Attitudes and Knowledge in America, evaluates public attitudes, knowledge, and policy preferences as they exist in 1996 and have changed over the past five years. It is based on a nationally representative telephone sample of 1,003 adult Americans age 18 and older, surveyed by Roper Starch Worldwide in May 1996.

A Sense of Balance in Environmental Attitudes

As with most issues facing society, the environment and its protection elicit different responses from various segments of the population, some who would protect every plant and animal and others who would care little if all tropical rainforests were cut down. Extremists aside, most Americans fundamentally believe that a balance between environmental protection and economic development can be reached, that natural resources can be managed in a way that protects the wildlife and ecosystems while allowing the human population to benefit from their planned use.

- The majority of the American public (63%) continue to say that environmental protection and economic development can go "hand in hand." Although this figure is down 6 percentage points since the 1995 survey, the continued high level of support for the "hand-in-hand" position indicates that while the debate about environmental regulations has changed the mind of some Americans, most continue to think that a balance is possible.
- When an impasse between protecting the environment and developing the economy occurs, most Americans would opt to protect the environment, by a 63% to 21% margin, a pattern similar to previous years.
- Asked to choose between protecting the environment by conserving wildlife and natural places by managing resources, and preserving natural resources by preventing development and restricting human use, fully seven Americans in 10 (71%) support the first, or conservationist perspective, a figure that is the same now as it was five years ago.
- Environmental optimism continues to be high, with 88% agreeing that "we can find a good balance that will allow us to enjoy economic progress and protect the environment." However, this optimism is not unbounded, as the public is split over whether environmental catastrophe is imminent: 48% agree and 48% disagree with the idea that "the 1990s is the last decade when humans will have a chance to save the earth from environmental catastrophe."
- In addition, over half of all Americans (58%) agree that "federal government spending should be shifted to environmental programs from other areas," an indication that many think current spending on the environment is not meeting the environment's needs. Still, a majority place credence in a technological cure, as 62% agree that "technology will find a way of solving environmental problems."

Increasing Americans' Environmental Knowledge and Involvement: Closing the Gap

If, as many experts believe, there is a link among public concern, education and behavior, then supporters of environmental conservation have a sizable population with which to work. This is because while the public's concern about the environment is high, several measures of environmental knowledge and behavior are low and have changed little in the last few years. It is this gap between concern, knowledge and involvement that environmental education programs seek to address. For example, fewer than 10 percent of the Americans surveyed in 1996 say they know "a lot" about of environmental issues.

This year, the survey begins to move toward an objective and reliable assessment of the relationship of concern to knowledge and behavior. Educating the public about the environment will increase knowledge and should certainly affect behavior. In fact, research conducted by Roper Starch for the National Environmental Education and Training Foundation in 1994 showed that environmental education correlated with environmental knowledge, which in turn correlated with involvement in environmental activities.

- While about half of the population (53%) say they know "a fair amount" about the environment, under 1 in 10 (9%) say they know "a lot." At the same time, over one-third (37%) say they know "only a little" or "practically nothing." These figures are unchanged from last year.
- The media is a key, and often the only, source of knowledge for most Americans about any issue. With regard to informing them about environmental issues, one-quarter of the population say the media is doing either an excellent (2%) or good (23%) job. While this is up 5 percentage points from 1995, it continues to be evidence that the media could play a much better role in educating the public on the environment. At the same time, the public's perception of media accuracy with regard to environmental situations is unchanged from last year, with slightly more Americans continuing to say that the media portray environmental situations accurately (41%) than say the media's coverage of the environment makes things seem worse than they really are (35%). A small proportion, about 1 in 7 (15%), continue to argue that the media make environmental situations appear better than they really are.

- Though half of the American public say that the 1990s is the last decade to prevent environmental catastrophe, only about one in four (27%) say that they have done volunteer work on behalf of the environment in the past year or two. This is a second gap that environmental education programs seek to address. As evidence that knowledge and behavior are linked, fully 58% of those who say they know "a lot" about the environment have volunteered on its behalf in the last two years, compared to 31% of those who say they know "a fair amount" about the environment and 14% of those who say they know "only a little" about the environment.
- Still, three-quarters of all Americans say they would be willing to pay an extra 25 cents per gallon for a gasoline that reduced pollution from a car by 50%. Though this may not be a large commitment, it shows that many Americans are ready to sacrifice a little for the benefit of the environment.

Renewed Support for Government's Role in Environmental Affairs

In the Congressional elections of 1994, Americans seemed to say that government at all levels had grown too large, with too many programs that infringed on the rights of individual citizens and business. Thus, many Americans called for a review of the costs and benefits of legislation, including laws and regulations protecting the environment. Having heard or learned of the proposed changes, though, Americans say that they do want federal regulation of environmental issues, but in a manner that is responsible, taking into consideration the rights of individuals as well as the needs of the environment.

- In response to proposals to weaken some environmental legislation, the belief that environmental laws and regulations have gone too far is down 3 percentage points from last year, to 19%. A plurality of the population (45%) continue to say that environmental laws and regulations have not gone far enough (a figure up slightly from 1995), especially when the issue in question may relate to the protection of their health. Perhaps as a result of increased media attention and public awareness of legislation passed in the 1970s and 1980s and being implemented today, those holding the belief that more government regulation of the environment is needed has decreased 18 percentage points in the last 5 years. As a consequence, those saying current laws go too far or have struck the right balance are up, 9 and 11 percentage points respectively, over that time.

- When asked their opinion of environmental legislation concerning specific issues, for two of five issues (water pollution and air pollution), the percentage of Americans saying that current regulations have not gone far enough is considerably higher than the percentage giving that same response with regard to the environment in a broad context. In other words, Americans may feel more connected or more concerned about the environment when considered in specific and personally relevant terms, or if the issue could have an impact on their health, rather than in abstract expressions, such as simply "the environment."
- Despite a new call to maintain the current level of environmental legislation, however, Americans say that cost should be a consideration: The majority of Americans (60%, up 10 points over the last five years) continue to say that the Endangered Species Act should consider cost rather than take any and all steps necessary to save an endangered species (32%, down 6 points over the past five years). Additionally, 72% of the public (up 6 points from last year) say that landowners should be compensated for the loss in value to their property due to environmental legislation. Thus, while agreeing with federal regulation of the environment, Americans want the government's policy to be responsible, especially when the legislation might infringe on the rights and freedoms of individual landowners.

The Environmental Gender Gap

- Government regulation of the environment is one of the issues on which females and males disagree the most. For example, 51% of females compared to 38% of males say that current laws to protect the environment do not go far enough. Conversely, males are nine percentage points more likely than females to argue that current laws go too far (23% vs. 14%). Other issues that exhibit gender differences include self-reported knowledge of the environment (68% of males feel they know at least "a fair amount," compared to 57% of females), volunteerism on behalf of the environment (30% of males vs. 24% of females) and the willingness to pay extra for a pollution-reducing gasoline (82% of females say they are at least somewhat willing to pay more, compare to 68% of males). [See also the table titled "The Environmental Gender Gap" in the Appendix to this report.] Environmental attitudes and behaviors are thus an example of the gap between men and women seen for various issues throughout American society.

Case Study: Knowledge of a Specific Environmental Issue -- Water

To bring together public environmental attitudes and knowledge, as well as opinions of environmental laws and regulations, Americans were asked about one specific issue, water. The public is clearly concerned about water quality, with 73% saying that current laws to fight water pollution have not gone far enough, while just 4% say such laws have "gone too far." However, there appears to be a gap between concern about water and knowledge about water conservation and management.

- Americans' lack of knowledge about water becomes evident when they are given six statements about water and asked if each is true or false. While one-half or more give the correct answer for four of the six statements, just 3% get all six correct, with an additional 17% getting five of the six correct. There is a clear need for additional education about water. Three subgroups are significantly more likely than average to get five or six answers correct: those who say they know a lot about the environment, households with incomes of \$50,000 or more, and college graduates. Also, males are more likely than females to correctly answer five or six statements.
- From a different perspective, it should be noted Americans fare better at the "false" statements about water. Whereas a majority correctly answer the four false statements, fewer than half correctly identify the other two statements as true. This may be an indication that the information Americans receive about environmental issues like water is insufficient, again evidence of a need for further education on the subject.

Outdoor Sports Enthusiasts

Apart from the general demographic subgroups, such as gender or age, five special subgroups are worth noting as their environmental attitudes and involvement sometimes stand apart from that of the general public. These five subgroups (anglers, hunters, motor boaters, downhill skiers, and golfers) are collectively called "outdoor sports enthusiasts", a term used to include both genders.

- The outdoor sports enthusiasts differentiate themselves from the general public in three ways: they are more likely to believe that a balance can be achieved between the environment and the economy; they are more likely to say they have volunteered on behalf of the environment in the past year or two; and they report a higher level of knowledge about environmental issues and problems. Thus, the outdoor sports enthusiasts are a group to be watched as they lead the nation in these important measures of environmental opinion and involvement.

Part One

A Sense of Balance in Environmental Attitudes

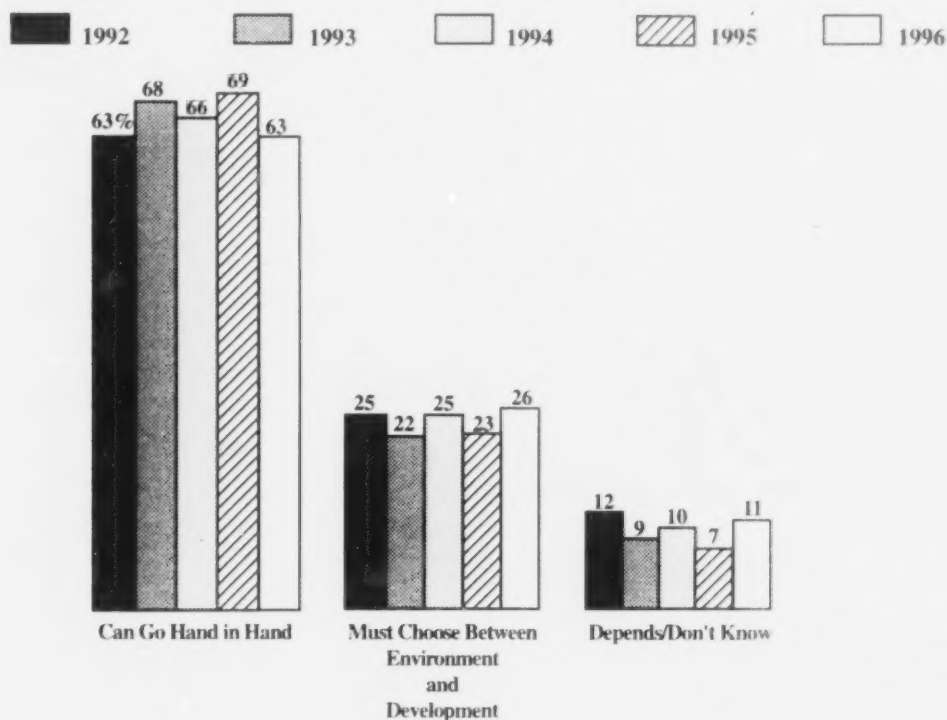
As with any issue of concern to a society, environmental protection elicits different responses from various segments of the population. At one extreme are people who believe the environment should be protected at all costs, regardless of the financial or psychological implications of this protection. At the other extreme are people who believe that the environment needs no special protection, that environmental legislation inhibits businesses and landowners from developing the economy. Deep down inside, however, most Americans fundamentally believe that a balance between environmental protection and economic development can be reached, that natural resources can be managed in a way that protects wildlife and ecosystems while allowing the human population to benefit from their planned use.

A Working Balance: The Environment and the Economy

There has long been debate over whether environmental protection and economic development are mutually exclusive, or whether they can be achieved together. The majority of Americans (63%) continue to say that the two goals can be reached together, though this figure is down 6 percentage points from last year's survey. In contrast, about one-quarter (26%) argue that a choice must be made between the environment and development.

It is important to note that while those saying the goals can go hand-in-hand has declined since last year, it is still the majority opinion, by greater than a two-to-one ratio. Though sentiments on this issue have fluctuated somewhat in the past few years, Americans' attitudes are now the same as they were five years ago. In other words, while the numbers have changed, the conclusion has remained the same: Americans want a balance between environmental protection and economic development.

Environmental Protection and Economic Development Can Go Hand in Hand



Question wording: Most of the time, do you think environmental protection and economic development can go hand in hand, or that we must choose between environmental protection and economic development?

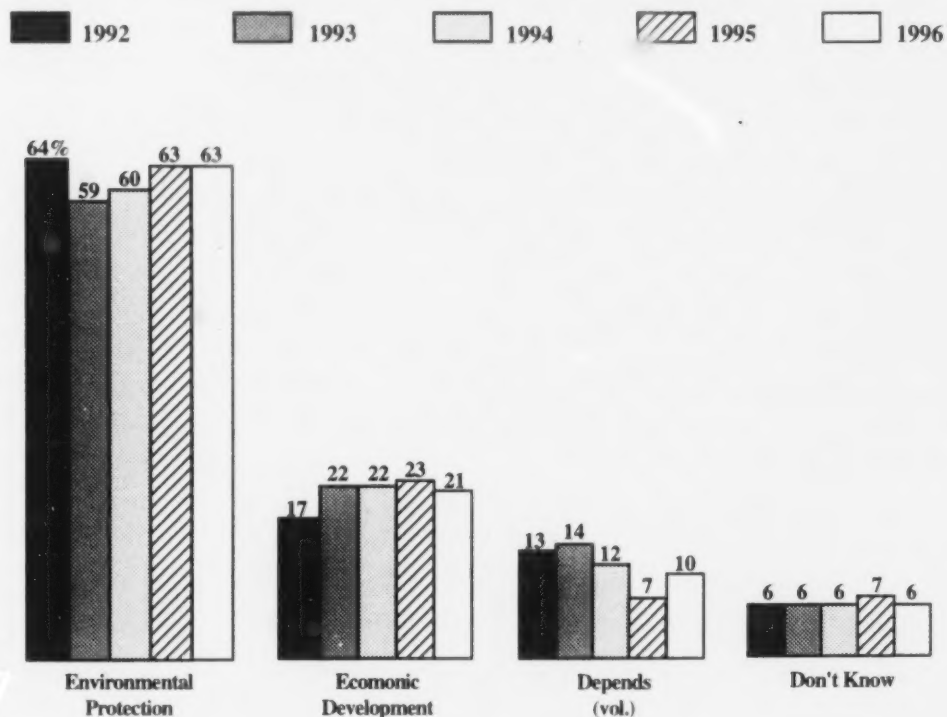
The belief that the environment and development can go together varies most notably by income (73% among households with incomes of \$50,000 or more, 53% of households with incomes under \$20,000), perhaps because environmental protection typically comes last to areas with less influence on policy, such as economically depressed regions, leading to increased cynicism among lower income households that environmental protection and economic development really can compliment each other. Other subgroup differences for the "hand-in-hand" position occur for region (highest in the West, 69%, lowest in the South, 60%), and environmental outlook (68% among Conservationists, 49% among Preservationists [see 2nd subsequent section]).

Americans Continue to Opt for the Environment When Conflicts Arise

Even in the best of all possible worlds, however, choices must sometimes be made. Should a balance between the environment and development prove impossible, Americans prefer protecting the environment to developing the economy by a three-to-one ratio, 63% to 21%. This is unchanged from 1995 and stable over the last five years, indicating a continued resolve among the American public that the environment should not be sacrificed to economic interests.

Several subgroups exhibit large differences in support for environmental protection when a choice must be made. For example, there is a gap in attitude between the two genders, as women are more likely than men to choose the environment, by a 69% to 58% margin. Age is also a determining factor, with support for environmental protection declining as Americans age, from 69% among 18 to 34 year olds to 63% of 35 to 44 year olds, 60% of 45 to 64 year olds, and 59% those age 65 and over. This trend may be linked to environmental knowledge, for as will be seen later in this report, Americans under the age of 45 tend to report greater knowledge about the environment than those age 45 or over. Also, people living in households with incomes under \$30,000 are more likely to favor the environment than those in higher income households. Preservationists (76%, [see next section]) are among the most likely to choose the environment over development.

When Compromise Is Impossible, Environment Favored Over Development



Question wording: When it is impossible to find a reasonable compromise between economic development and environmental protection, which do you usually believe is more important: economic development or environmental protection?

Outlook on the Environment: Conservation Versus Preservation

In general, there are two main viewpoints relating to environmental protection, one focused on preserving the environment and the other centered on conserving it. Americans were read the following definitions of the "preservationist" and "conservationist" philosophies, and asked which was closer to their own view:

The only way to preserve wildlife, natural areas, and natural resources is to prevent development and restrict most other human activity in these areas

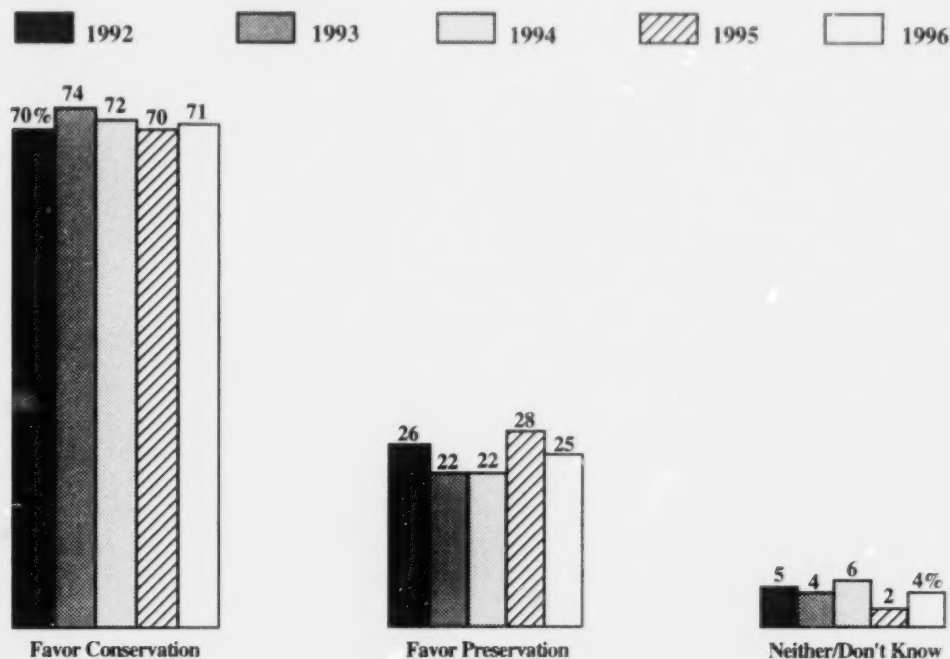
or

We can protect and conserve wildlife, natural areas, and natural resources by managing these resources while also using them for the benefit of our economy and the public

In light of their support for the tenet that the environment and the economy can go hand-in-hand, it is not surprising that 71% of Americans identify more with the "conservationist" position, as represented by the second statement. In contrast, about a third as many (25%) support for the "preservationist" philosophy. These figures are basically unchanged from previous years, and support for both philosophies are uniform across subgroups.

Once again, Americans are saying that balance is necessary, that a "win/win" situation exists whereby the environment can be protected at the same time it is used to help the economy grow and serve the needs of the population.

Americans Prefer Conservation to Preservation



Question wording: I am going to read two statements about protecting the environment and I want you to tell me which one you feel describes your own view best. (REPEAT CHOICES IF NECESSARY)

The only way to preserve wildlife, natural areas, and natural resources is to prevent development and restrict most other human activity in these areas;

OR

We can protect and conserve wildlife, natural areas, and natural resources by managing these resources, while also using them for the benefit of our economy and the public.

A Sense of Balance

Question wording: Please indicate for each of the following statements whether you strongly agree, mostly agree, mostly disagree, or strongly disagree.

A majority of Americans (62%) also agree with the statement that "Technology will find a way of solving environmental problems," indicating a belief that environmental protection and the economy are linked. Demographically, this attitude varies little among subgroups, though the "environmental gender gap" appears as males (65%) are more likely than females (58%) to have faith in a technological cure. Northeasterners (69%) express greater agreement with this statement than those in other regions, especially those living in the West (53%). In line with their outlook toward the environment, Preservationists are the subgroup least likely to agree with this statement (46%).

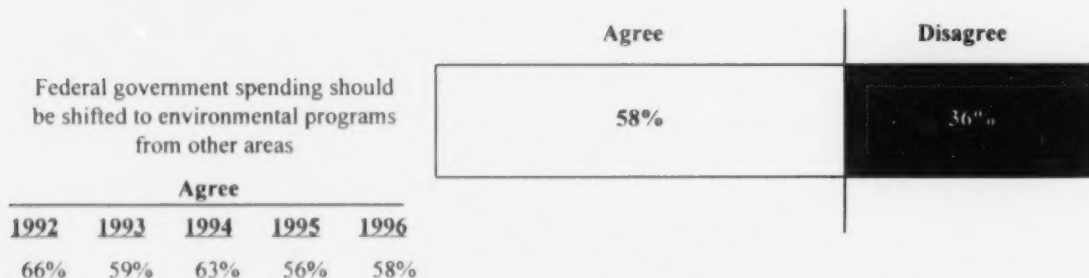
Technology Will Save the Environment

					Agree	Disagree
Technology will find a way of solving environmental problems					62%	34%
Agree						
1992	1993	1994	1995	1996		
58%	60%	59%	61%	62%		

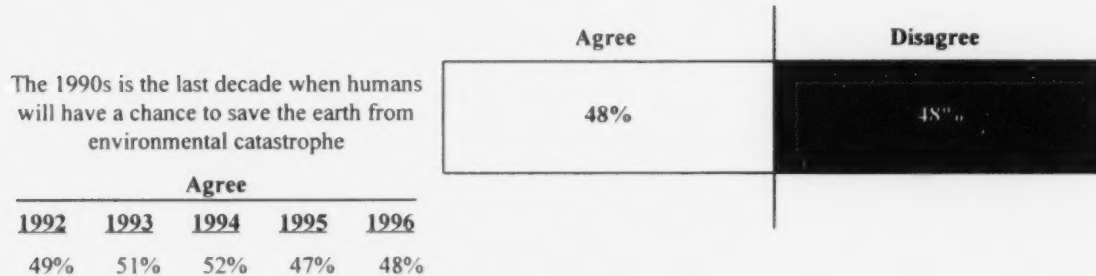
Question wording: Please indicate for each of the following statements whether you strongly agree, mostly agree, mostly disagree, or strongly disagree.

However, there is a limit to this optimism. Over half (58%) of the American public agree that "federal government spending should be shifted to environmental programs from other areas," an indication that many think current spending on the environment is not meeting the environment's needs. It should be noted that this is down eight percentage points over the last five years, perhaps reflecting the public's desire for responsible government spending and the need for a balanced budget, a theme that will be revisited later in this report. At the same time, the public is split over whether environmental catastrophe is imminent, as 48% agree and 48% disagree with the idea that "the 1990s is the last decade when humans will have a chance to save the earth from environmental catastrophe." Though the decade is now more than half complete, many Americans still expect serious consequences if more action on this issue, whether in the form of a technological cure or financial assistance, is delayed into the next millennium.

Shifting Federal Spending



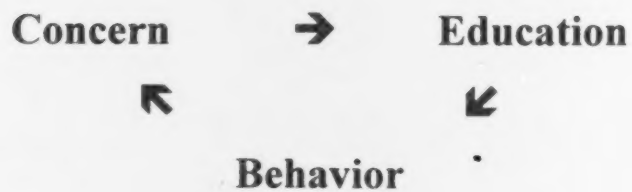
Environmental Catastrophe Imminent



Question wording: Please indicate for each of the following statements whether you strongly agree, mostly agree, mostly disagree, or strongly disagree.

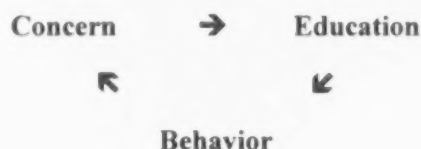
Part Two

Increasing Environmental Knowledge: The Concern -- Education -- Behavior Nexus



In a 1994 survey conducted by Roper Starch and commissioned by the National Environmental Education and Training Foundation, entitled *Environmental Attitudes and Behaviors of American Youth*, a statistical procedure known as "path analysis" was used to determine that education about the environment leads to knowledge, which in turn leads to greater involvement and concern. While the population studied in the youth survey differed from the present survey, we can assume that the same correlation exists with adults.

The Foundation is starting, with this 1996 survey, to look at the nexus between concern, education, and behavior and plans to develop this effort in the coming years into a valid and reliable definition of this relationship. The following is a schematic of the model:

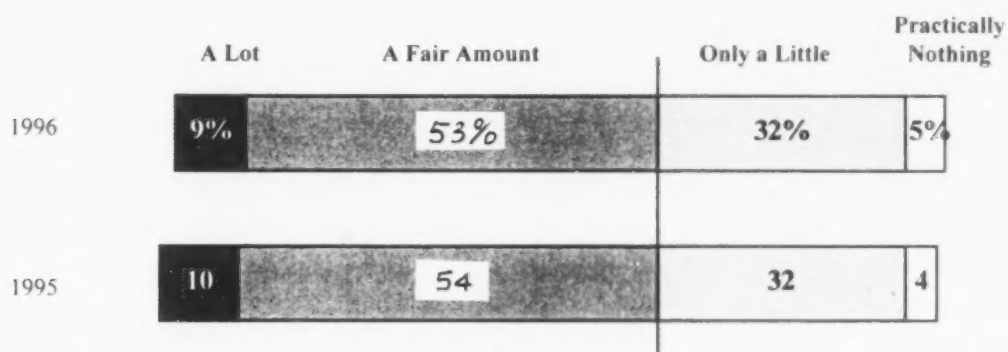


In this part of the report, several measures of knowledge and involvement are examined. As will be seen in subsequent sections, these measures are largely unchanged from last year. Thus, according to the model above, increasing environmental knowledge should increase individual involvement in environmental affairs. Therefore, education about the environment is required if Americans are to understand the impact of decisions affecting the environment and be able to both communicate their attitudes toward the environment to others, such as their firm belief in a balance between environmental protection and economic development, and become more involved in environmental activities.

Need for Further Environmental Education Remains High

With the publication of Rachel Carson's *Silent Spring* in the 1960s, calling attention to the state of the environment, and the first Earth Day in 1970, the environment has become both a field of study and a regular topic of conversation and media coverage. Yet, nearly three decades later, just 9% of the public says it knows "a lot" about the environment, though 53% say they know "a fair amount." Still, over one-third report that they know only a little (32%) or practically nothing (5%) about the environment. These results should be cause for concern, for as will be seen later in this report (and as is described by the "nexus"), knowledge is an integral part of the model that links how much people know about a subject to how concerned they are about it and to how actively they participate in it.

Knowledge of Environmental Issues and Problems



Question wording: In general, how much do you feel you yourself know about environmental issues and problems -- would you say you know a lot, a fair amount, only a little, or practically nothing?

Environmental knowledge is highest among those with at least a college degree (18% say they know "a lot") and in the West (15% "a lot"). There is also a gap between the genders, as men are more likely than women to say they know a lot about the environment (13% vs. 5%).

Also of note is the finding that Americans age 18 to 34 are less likely to report that they know "a lot" about the environment than older Americans. In fact, each of the other three age groups (35 to 44, 10%; 45 to 64, 11%; and 65 and over, 9%) are more likely than 18 to 34 year olds (6%) to report the highest level of overall knowledge of environmental issues and problems. If the "a lot" and "a fair amount" categories are combined, however, those under age 45 report a higher level of environmental knowledge than those over age 45 (18-34: 65%; 35-44: 66%; 45-64: 59%; 65 and over: 57%). Evidently, younger Americans are not as confident about their knowledge of the environment as older Americans, reflected in the scores for "a lot" of environmental knowledge.

Improved Perception of Media Coverage of the Environment

How do Americans learn about environmental issues? Like any subject, the media are probably the pre-eminent source of knowledge about the environment. In fact, the 1994 NEETF/Roper survey of American youth found that over seven in 10 young people used television as a source of information about the environment. Yet the environment is just one issue the media cover. As such, only one-quarter of the population say that the media do an excellent (2%) or good (23%) job of informing them about environmental issues. While this is up 5 percentage points from 1995, it continues to be evidence that the media could play a much better role in informing the public about the environment.

The Media: Doing a Better Job of Reporting Environmental Issues

	Excellent	Good	Fair	Poor
1996	2%	23%	49%	24%
1995	3%	17%	52%	27%

Question wording: Do you think the media generally do an excellent job, a good job, only a fair job or a poor job of informing you about environmental issues?

Interestingly, the public's perception of media accuracy with regard to environmental situations is unchanged from last year. Slightly more Americans continue to say that the media portray environmental situations accurately (41%) than say the media's coverage of the environment makes things seem worse than they really are (35%). An additional 15% believe the media make environmental situations appear better than they are in reality. Thus, the media will have to overcome the perception that they are biased in order to serve as a reliable vehicle for distributing environmental information to the general public.

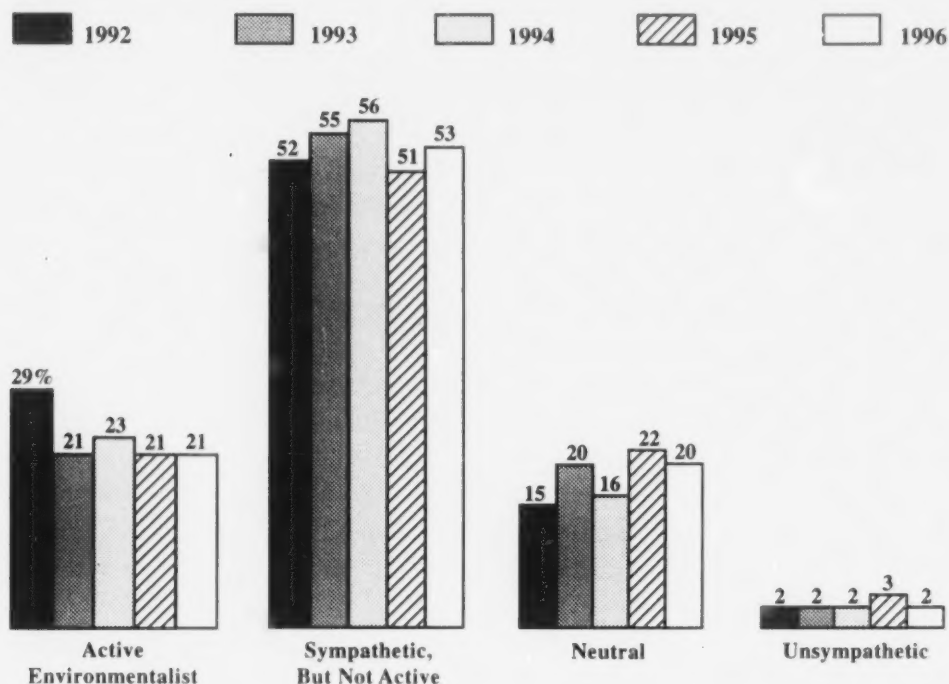
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A Pro-Environmental Stance

A fairly low but recently stable number of Americans describe their outlook toward the environment as "active environmentalist" (21%), although another 53% say they are "sympathetic toward environmental concerns but not active." An additional 20% say they are "neutral" toward the environment, while just 2% define themselves as "unsympathetic" to environmental concerns. When viewed over a five year period, the percentage of Americans considering themselves "active environmentalists" has dropped eight percentage points, while those saying they are "neutral" has climbed five percentage points. Still, the majority continue to be "sympathetic to environmental concerns but not active."

These findings are consistent with earlier observations of broad concern about the environment and its protection, albeit coupled with fairly low "active" involvement. Thus, the challenge will be to convert those who are "sympathetic toward environmental concerns but not active" into "active environmentalists." Education may once again be the answer, for many people believe that knowledge and concern lead to involvement, a theory confirmed by the NEETF/Roper survey *Environmental Attitudes and Behaviors of American Youth* in 1994. Educational efforts might first target subgroups which are above average in "sympathetic toward environmental concerns but not active" members: those living in the West (62%); those with some college education (62%); and those age 65 or over (61%).

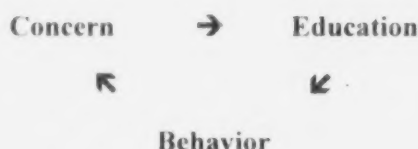
Degrees of Environmentalism



Question wording: In recent years, interest in the environment has increased. Do you think of yourself as an active environmentalist, or sympathetic toward environmental concerns but not active, or neutral, or generally unsympathetic to environmental concerns?

Knowledge and Involvement -- Closing the Gap

Organizations, whether local or national in scope and regardless of their focus, often operate on a model that awareness creates a desire for knowledge, which in turn increases the likelihood of involvement, which in turn raises the level of concern and further involvement. Here again is a depiction of the model:

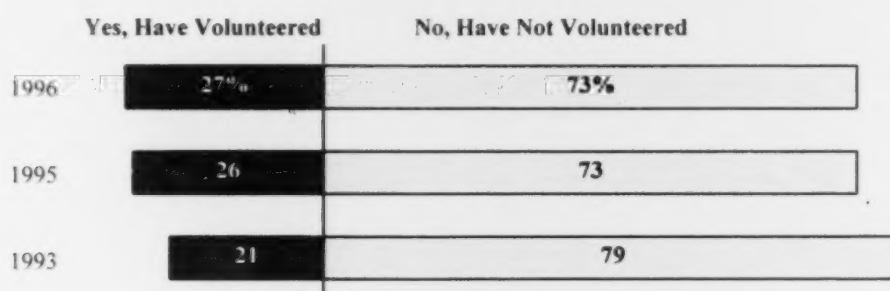


This model is true when the focus is the environment, because the more people know about the environment, the more likely they are to perform volunteer work on its behalf. Thus, while 27% of all Americans report doing "green" volunteer work in the past year or two, this rises an impressive 31 percentage points among those who say they know "a lot" about the environment, to 58%. In contrast, 31% of those who know "a fair amount" say they have volunteered for the environment, a figure that falls to 14% among those who say they know "only a little" about the environment. Informing people about environmental issues and problems increases the likelihood that they will take the time to get involved. These trends, also known as the concern - education -- behavior nexus, are confirmed by the 1994 study of American youth in grades 4 through 12 for NEETF, in which young people who said they knew a lot about the environment were much more likely to engage in a list of environment-friendly activities than those who knew only a little or practically nothing about the environment.

Although volunteering on behalf of the environment among adults is unchanged from 1995, it remains above the level found the first time this question was asked in 1993 (21%). Thus, while there has been growth in environmental involvement, it tends to be confined to those who already know at least a fair amount about the environment.

It is this gap between knowledge and involvement that environmental education programs seek to address. As the data show that environmental knowledge increases involvement in environmental activities, if more Americans are educated about the environment, there should be an ensuing increase in environmental volunteerism.

Volunteering for the Environment



Question wording: By any chance, have you yourself done volunteer work on behalf of the environment in the past year or two?

Apart from those who say they know "a lot" about the environment, gender, age and education are keys to understanding who is performing "green" volunteer work. Thus, men (30%) are more likely than women (24%) to say they have volunteered in the past year or two (men also reported greater environmental knowledge than women), further evidence of an environmental gender gap. Those with a college degree or more (36%) are more likely to have volunteered than those with some college (24%) or a high school diploma or less (24%).

Perhaps not surprisingly, volunteerism is higher among younger adults than among older adults. Fully 37% of 18 to 34 year olds report volunteering for the environment, compared to 28% of 35 to 44 year olds, 21% of 45 to 64 year olds, and 13% of those age 65 or over. The age differential may be due to two factors: the often physical nature of working for the environment (such as picking up trash or clearing rivers); and other competing concerns in a household to command the attention of those age 35 and older (such as children, greater responsibility at work, or owning a home).

On a similar subject, while approximately one-quarter of the American public say they have actually done volunteer work for the environment in the past year or two, interest in volunteering for a national event to restore natural resources on National Forests, National Parks, Wildlife Refuges or other nearby public land is considerably higher. Over 6 Americans in 10 (61%) say they are either very (15%) or somewhat (46%) interested in such a "national environmental event." These figures indicate a belief that something must be done to aid the environment, and that many Americans are willing to give a little of themselves, above and beyond government intervention or waiting for a technological cure, to help restore or improve the quality of the environment. The challenge lies in converting those who are interested into volunteers, and further education about the environment may be a means to this end.

Interest in Volunteering for National Environmental Event

	Very Interested	Somewhat Interested	Not Too Interested	Not At All Interested
1996	15%	46%	20%	17%
1995	17	42	21	19

Question wording: How interested are you in volunteering in a national event to restore natural resources on National Forests, National Parks, Wildlife Refuges or other public land near where you live? Are you very interested, somewhat interested, not too interested, or not at all interested?

Additional evidence that knowledge is linked to involvement emerges when the level of interest of the "green subgroups," i.e., those Americans already thinking favorably about or acting on behalf of the environment, is examined. For example, fully 75% of those who say they know a lot about the environment say they are at least somewhat interested in a national environmental event, as are 81% of green volunteers and 68% of preservationists.

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Americans Willing to Pay for "Greener" Gasoline

The commitment to the environment among the general public is further reflected in the high percentage who say they would be willing to pay 25 cents more per gallon for a gasoline that reduced pollution from a car by 50%. Fully three Americans in four say they would be very (36%) or somewhat (39%) willing to pay extra for a "greener" gasoline, the same level as in 1995. In their acceptance of a gasoline surcharge, Americans are saying they are ready to take individual action to help protect the environment.

Willingness to Pay for More Expensive, Pollution-Reducing Gasoline

	Very Willing	Somewhat Willing	Not Too Willing	Not Willing At All
1996	36%	39%	12%	11%
1995	36	40	10	12

Question wording: If there were a gasoline that reduced pollution from your car by 50%, how willing would you be to pay 25 cents more per gallon for it -- very willing, somewhat willing, not too willing or not willing at all?

Majorities of all subgroups would be at least somewhat willing to pay extra for a "greener" gasoline. Gender and age exhibit the greatest subgroup differences. The environmental gender gap is once again in evidence, as females are 14 percentage points more likely than males to be willing to pay extra for a pollution reducing gasoline (82% vs. 68%), even though males earlier expressed greater belief than did females in a technological cure to environmental problems. Willingness to pay for a more expensive, pollution-reducing gasoline decreases sharply with age, from 83% among 18 to 34 year olds, to 72% of those 35 to 44 and 73% of those 45 to 64, to 65% of those 65 and over.

Part Three

Renewed Support for Government's Role in Environmental Affairs

Last year, Americans were calling for a review of the role of government at the federal, state and local levels, as evidenced in the Republican landslide in the November 1994 elections. Many Americans believed that the costs and implications of environmental protection were getting out of hand and threatening, if not actually discouraging, economic development. This attitude was coupled with a general distrust of institutions, and a shift toward holding individuals responsible for the quality of the environment.

This year, the public is again changing course, expressing somewhat more support for the government's role in environmental affairs. At the same time, they want the government to be more responsible, to consider the impact its regulations will have on individual citizens, and to grant pecuniary compensation when necessary. What Americans are calling for is a balance between environmental protection and economic development.

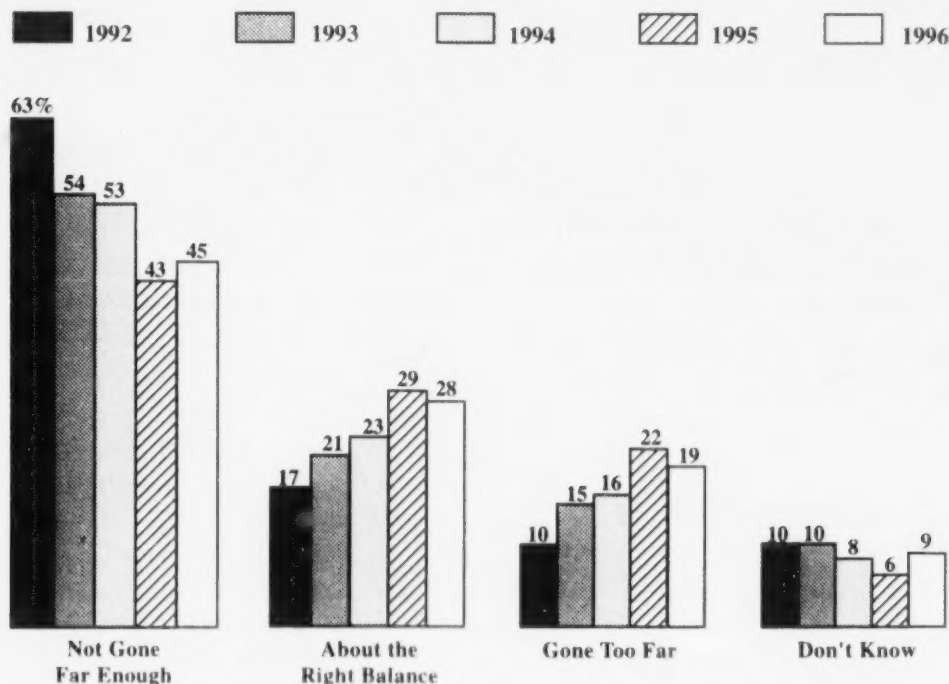
Anti-Environmental Regulation Mood Turns a Corner

In 1995, the percentage of Americans agreeing that environmental laws and regulations had "gone too far" was the highest in the four years this data had been tracked, at 22%, compared to 16% the year before. Meanwhile, a historically low percentage (43%) felt that environmental regulations had not gone far enough. This was in-line with the overall shift in the public's attitude toward reviewing and rethinking the role and policies of government.

In 1996, however, the percentage of Americans saying that environmental laws and regulations have "gone too far" has retreated somewhat, to 19%. The percentage saying the policies have "not gone far enough" is up 2 percentage points, to 45%, compared to a 10 percentage point decline observed a year earlier.

This measure of the public's environmental attitudes has changed significantly over the past five years. Perhaps as a result of increased media attention and public awareness of environmental legislation, those who say current environmental laws do not go far enough has decreased 18 percentage points. At the same time, those saying that current laws go too far has increased 9 percentage points, while those saying the laws have "struck about the right balance" has increased 11 percentage points. In the eyes of many Americans, the environmental laws and regulations passed over the years have had an impact, though a plurality continue to believe in the need for further legislation to protect the environment.

Opinion of Environmental Laws and Regulations



Question wording: There are differing opinions about how far we've gone with environmental protection laws and regulations. At the present time, do you think environmental protection laws and regulations have gone too far, or not far enough, or have struck about the right balance?

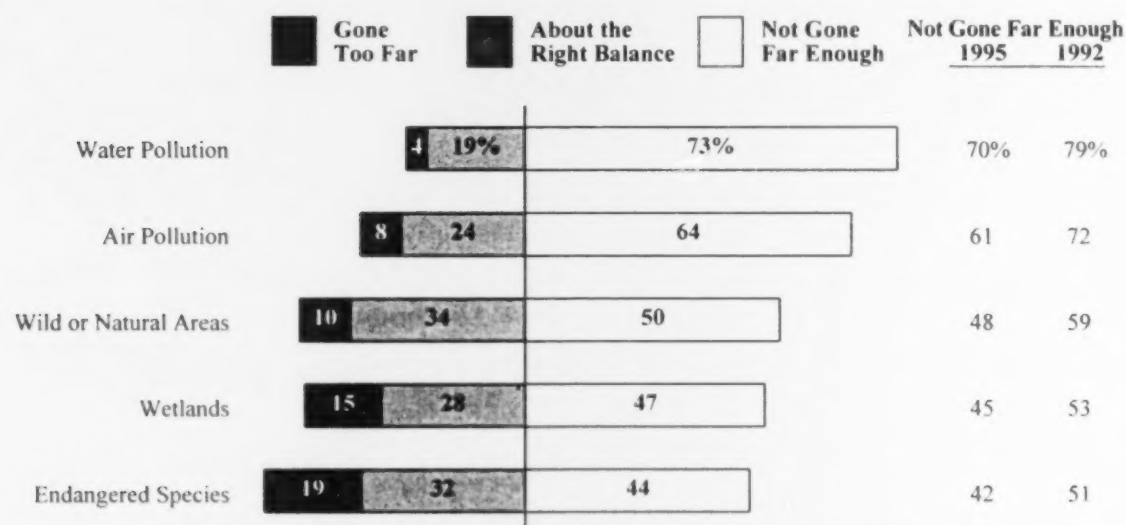
There are several variations among key subgroups for the "gone too far" and "not gone far enough" positions in 1996. For example, males are more likely than females to support the gone too far position, 23% vs. 14%, while more women than men opt for the not gone far enough position (51% vs. 38%), once again evidence of the environmental gender gap. Age presents a similar division, as the belief that environmental laws and regulations have gone too far is higher among Americans age 45 to 64 (23%) and age 65 and over (23%) than among those age 35 to 44 (18%) and age 18 to 34 (14%), with the opposite being true for the belief that environmental laws and regulations have not gone far enough (from a high of 51% among 18 to 34 year olds to a low of 39% among those 65 or over).

Hunters (29% [an "outdoor sports enthusiast" subgroup defined in Part Five]) and those living in the West (24%) are two groups especially supportive of the view that environmental laws have already gone too far. Support for the view that environmental policies have not gone far enough is highest among those who have a "preservationist" outlook toward human interaction with the environment (64%), Northeasterners (54%), and green volunteers (52%).

There also has been a moderate rebound in the mandate for environmental regulation in specific areas. Following declines between 1994 and 1995, those advocating more regulation is up 3 percentage points for laws fighting water pollution or air pollution. Over the long-term, however, most of the movement in regulatory opinion is toward the view that current laws strike about the right balance. Few Americans advocate a weakening of current regulation for any of the five specific issues asked about.

Moreover, the percent of Americans saying that environmental legislation has not gone far enough is higher when a specific type of law is named than is the case overall. For example, while 45% say that environmental protection laws have gone too far in general, fully 73% say that regulations to fight water pollution have not gone far enough. The same is true for air pollution (64% say these laws do not go far enough), wild and natural areas (50%), and wetlands (47%). The only exception to this pattern is the protection of endangered species (44% say this specific type of law has not gone far enough).

Current Regulation of Specific Issues



Question wording: Thinking now about some specific areas, at the present time, do you think laws and regulations for (READ ITEM) have gone too far, not far enough, or have struck about the right balance?

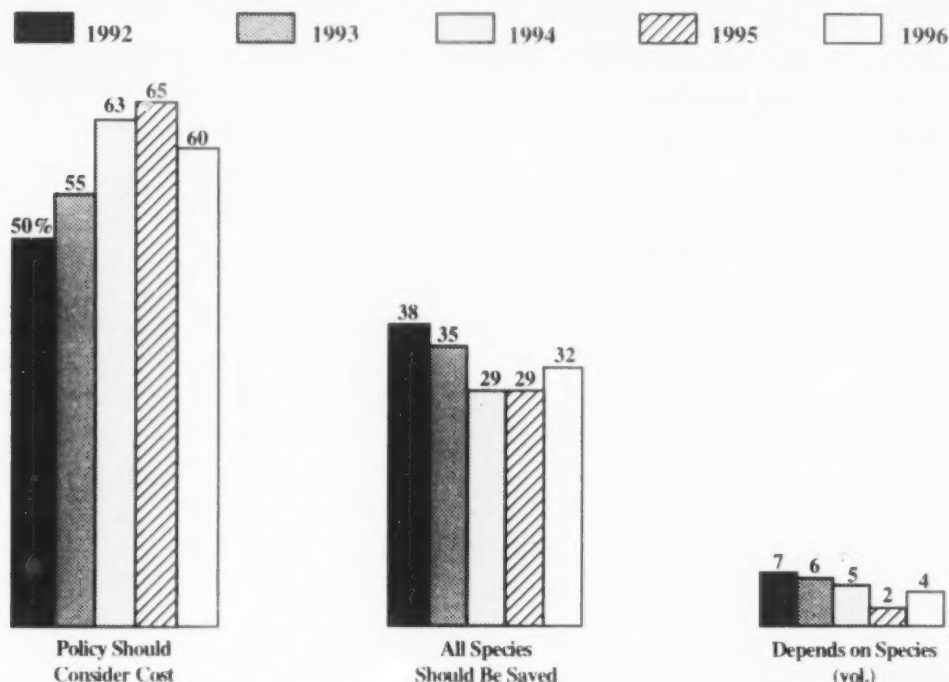
Clearly, context is important for some Americans, as "naming names," by citing specific kinds of environmental protection laws, seems to create a greater sense of urgency about that issue and a greater acceptance of laws protecting that environmental concern. Furthermore, Americans are more likely to express a desire for further environmental legislation when the issue is one that they can see having an impact on their health; the affects of water and air pollution on daily life are perhaps easier to assess than the loss of a wetland or an endangered species. In other words, people may find it easier to give an opinion when faced with a topic they can visualize, as opposed to an abstraction. Thus, it may prove easier to educate the public about the environment when a specific issue is cited, rather than "the environment" in general.

Considering Implications of The Endangered Species Act

The Endangered Species Act, passed in 1972 and renewed by Congress in 1995, requires the federal government to take whatever steps are necessary to prevent any type of plant, animal or insect species from becoming extinct, even if these steps have a financial impact on the landowners, businesses or local economies where the species live. This legislation has been surrounded by controversy for years, as the financial and emotional costs affect both the government and the landowner when saving a species from extinction. Americans were asked whether all species should be saved or whether the law should consider cost. As in previous years, more people say the policy should consider cost (60%) than say all species should be saved (32%), evidence that Americans continue to want environmental policy that is responsive to their needs and respects individual rights at the same time that it protects the environment.

Importantly, however, the percent of Americans saying the policy should consider cost declined 5 percentage points from 1995, the first time this figure has decreased. Yet, it should also be noted that this figure is still up 10 percentage points over the last five years. As with other laws and regulations, Americans are considering anew both the costs and benefits of the Endangered Species Act. The majority of Americans continue to realize that the need to protect the air, water and other species that inhabit this planet must be balanced with the affects to people from enforcement of the law.

Costs in Saving Endangered Species



Question wording: In 1972 Congress passed a law called the Endangered Species Act. This law requires the federal government to take whatever steps are necessary to prevent any type of plant, animal, or insect species from becoming extinct, even at a cost to landowners, businesses, or the local economies where the species live. Do you agree all endangered species of plants, animals, or insects should be saved regardless of the costs, or do you think the policy should take cost into consideration?

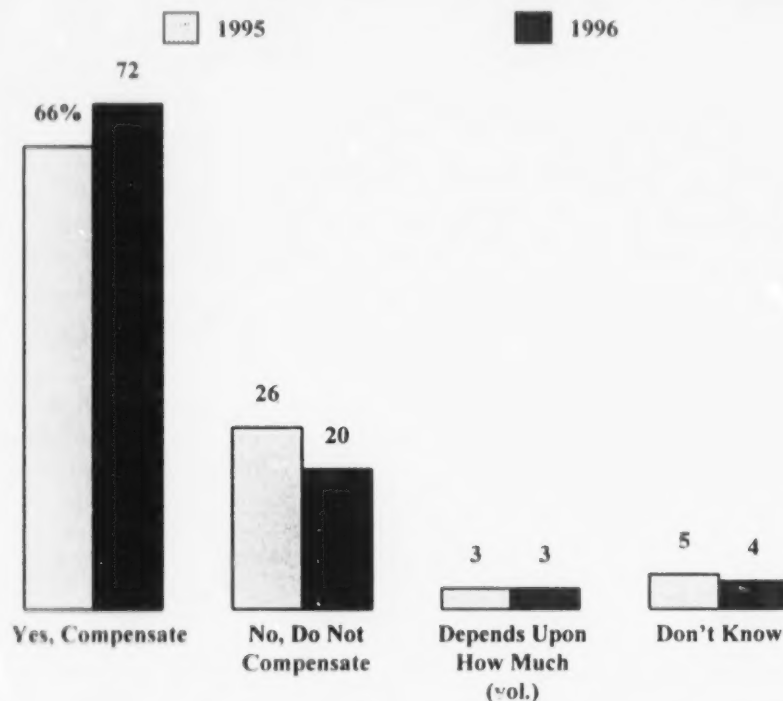
Support for the position that all species should be saved is highest among preservationists (50%) and Americans age 18 to 34 (43%). Support for the position that the Endangered Species Act should consider cost is highest among Americans age 45 to 64 (70%), households with incomes of \$50,000 or more (69%), and conservationists (67%).

Compensation for Impact of Environmental Legislation

One of the results of environmental legislation like the Endangered Species Act is that land use is restricted, often reducing the value of the impacted land. Many people argue that the government should be required to compensate people or businesses for the lost value of land that results from the protection of an endangered species or wetlands area. Fully 72% of Americans, up 6 points from 1995, agree that the government should compensate landowners and businesses for the lost value of their land arising from legislation enacted to protect the environment.

Interestingly, this finding comes at the same time that Americans say they want the government to uphold legislation to protect the environment, again indicating a desire that the government's environmental policy be responsible as well as effective; the government should protect the environment, but also understand and account for the impact of its regulations. As was seen for attitudes toward laws to reduce air pollution compared to laws to protect wild or natural areas, when legislation to protect an endangered species or wetland is cast in terms of the impact it may have on humans, i.e. a monetary impact, Americans reevaluate the situation, in this case often opting for an individual's property rights rather than environmental protection.

Compensation for Land Devalued by Endangered Species or Wetlands Restrictions



Question wording: Sometimes, protecting an endangered species or wetland means that a private individual or business is restricted in how it can use its land and therefore the value of the land may be reduced. Do you think the government should be required to compensate that person or business for the lost value of the land, or not?

Only a few subgroups exhibit significant differences. Not surprisingly, given their definition as a group that wants to manage natural resources to protect the environment while also benefiting the economy and the public, conservationists (76%) are more likely than preservationists (66%) to push for compensation. Those in the South (76%) and West (75%) are more likely than those in the Northeast (66%) to argue for compensation, perhaps because the South and West are often less developed and there are more people who stand to be affected by environmental protection laws and regulations that devalue property.

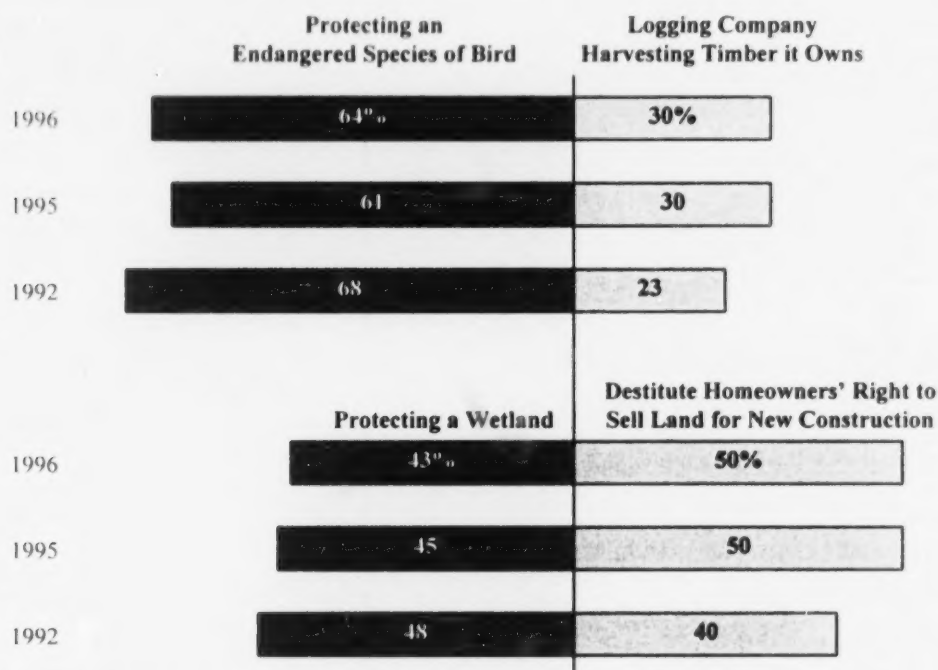
Further evidence of the parallel trends of environmental protection and government responsibility appears when Americans are asked to choose between protecting wetlands or endangered species and protecting a landowner's right to do what he wants with his property.

Two scenarios were presented to the American public. The first centers on a logging company that wants to harvest high-quality timber in a forest it owns, but is told that doing so will harm a species of bird that is threatened with extinction. As in the past, Americans prefer protecting the endangered species of bird to the logging company's rights, this time by a 64% to 30% margin. Importantly, when viewed over a five year period, those favoring the logging company's rights has increased seven percentage points.

The second scenario focuses on a different set of circumstances. A destitute homeowner wants to raise money by selling an acre of his land, but is told that his property is part of a wetlands area that might be damaged if development is permitted. In this case, though, Americans narrowly side with the homeowner, by a 50% to 43% margin. Especially relevant is the difference in opinion from 1992 to 1996: Americans are now 10 percentage points more likely than they were five years ago to side with the homeowner rather than with the wetland.

Thus, though they agree with legislation to protect the environment, often saying the laws have not gone far enough, Americans also want the government's policy to be responsible, especially when the legislation is thought to infringe on the rights and freedoms of individual landowners. The closer the conflict between the environment and the economy is to "the home and the hearth," the more likely it is that Americans will opt to protect the rights of the individual over the environment, if there is no chance for balance and a choice between the two must be made.

Choosing Between the Environment and Property Owners' Rights



Question wording: Sometimes it is not so obvious which is more important -- the public's interest in protecting wetlands and endangered species on the one hand, or protecting a land owner's right to do what he wants with his property on the other. I would like to ask you about some specific situations and for each one I want you to tell me which is more important -- PROTECTING THE ENVIRONMENT or the OWNER'S RIGHTS to do what he wants with his property. First, (READ ITEM). Which is more important -- protecting the environment or the owner's rights?

Only a few subgroups show differentiation. Support for the environment in both scenarios is higher among preservationists (who want to keep people and the environment separate) than among conservationists (who want people and the environment to coexist) by a 79% to 59% margin for the endangered bird and a 59% to 37% margin for the endangered wetland. Younger Americans are more supportive of the environment than older Americans: 79% of those 18 to 34 opt to protect the endangered bird, compared to 51% of those 45 to 64 and 49% of those 65 and older; and 50% of those 18 to 34 opt to protect the wetland, compared to 35% of those 45 to 64 and 40% of those age 65 and over.

Again, as was the case with attitudes toward environmental protection laws, attitudes toward compensation for land devaluation differ when discussed in general and specific terms. Just as naming specific issues increases the number of Americans saying environmental laws and regulations have not gone far enough, citing specific examples of conflicts between the environment and landowners often, but not always, increases the number of Americans favoring environmental protection. Putting the spotlight on an endangered bird or wetland generally strengthens Americans' connection with the environment, so long as the impact of the regulation is not viewed as an undue burden. Citing specific cases may be the best way to ensure that Americans learn the ins and outs of environmental regulation. Also, it follows that when people identify with a situation rather than an abstraction, they become more interested in or concerned about it, which in turn often leads them to become more knowledgeable about it and eventually act upon their new knowledge -- the concern, education, behavior nexus.

Part Four

Case Study: Knowledge of a Specific Environmental Issue -- Water

Water is one of the basic components of life on Earth. In fact, water comprises 70% of the human body. As such, it is imperative that sources of water be kept clean for both human and wildlife consumption. The Foundation therefore chose to examine Americans' attitudes and knowledge of water conservation and management. Moreover, it was earlier seen that the majority of Americans feel that environmental protection laws to fight water pollution have not gone far enough. The public was presented with several true/false statements to test their knowledge of and concern about water resources. It becomes evident that while many Americans know a fair amount about water, there is much room for improvement, much room for additional education.

Knowledge of Water Facts

To determine the extent of the public's knowledge about water, Americans were asked to judge whether six statements about water and water sources were true or false. Examined individually, the statements serve as snapshots depicting the high and low points of the public's knowledge. The Foundation will release similar "report cards" of environmental knowledge in future surveys.

The statement which the greatest percentage of Americans get correct is "All tap water in the United States is safe for drinking." Fully 86% of the public correctly say that this statement is false. With bacterial contamination, algae, and man-made chemicals finding their way into tap water across the nation in the last few years, this may be the only statement of the six to be covered thoroughly by the media; many Americans probably recall being instructed to boil tap water before use.

Nearly as many Americans (78%) correctly find the following statement false: "Chemicals used to make lawns greener have no effect on the quality of drinking water."

Just over half correctly identify two other statements as false: "Fully 25% of Americans get their drinking water directly from the ocean" (54% correct); and "New sources of freshwater are being discovered every day" (52% correct). Large proportions of the public, however, report that they "don't know" whether these two statements are true or false. Men are more likely than women to correctly answer both of these statements (by margins of 13 and 10 percentage points, respectively), perhaps reflecting their higher level of self-reported environmental knowledge.

About four Americans in 10 (43%) correctly indicate that "Only 1% of the world's water is fresh and available for use" is true. Once again, nearly 3 in 10 say they don't know the answer, evidence of a need for more public information on the subject.

The only item for which a majority of the American public is misinformed is "No rivers or lakes in the United States are safe for drinking," with 62% believing this statement to be false and only 26% realizing it is actually true, a resounding call for additional information and additional education about water. Women (31%) are more likely than men (22%) to give the correct response to this statement.

Knowledge About Drinking Water and Water Sources

Correct Answer (T=True, F=False)	Percent Giving Correct Answer	Percent Answering Incorrectly	Percent Saying "Don't Know"
All tap water in the United States is safe for drinking (F)	86%	10	4
Chemicals used to make lawns greener have no effect on the quality of drinking water (F)	78%	13	9
Fully 25% of Americans get their drinking water directly from the ocean (F)	54%	15	30
New sources of freshwater are being discovered every day (F)	52%	25	23
Only 1% of the world's water is fresh and available for use (T)	43%	29	28
No rivers or lakes in the United States are safe for drinking (T)	26%	62	11

Question wording: Now I am going to ask you a few true or false questions. Please answer each question to the best of your knowledge. If you don't know if the statement is true or false, just tell me so. First...(ASK ABOUT EACH)

It should be noted that there is often room for equivocation with statements of "fact." For example, one of the statements discussed above, "New sources of freshwater are being discovered every day," (defined as false by official standards), could be construed as true if an individual considers a freshly-dug well a "new" source of drinking water. Similar arguments could be put forth against the designation that "no rivers or lakes in the United States are safe for drinking," as this definition takes into account bacteria that are unhealthy but may not sicken everyone who drinks untreated water. Despite the possibility of equivocation, though, it is apparent that few Americans are especially knowledgeable about water and water sources.

Taken as a group, the responses to the six statements show a larger need for education about water. Overall, just 3% of the population correctly answer all six statements, while an additional 17% get five of the six correct, meaning that only 1 American in 5 can be said to be very knowledgeable about water issues.

The majority of Americans know a moderate amount about water, correctly answering either four (30%) or three (26%) statements. A full quarter of the population, though, get just two (16%), one (7%) or none (1%) of the statements correct. Clearly, further education is necessary if misinformation is to be remedied. It is important that people know the facts about water (as with any other issue) in order to make informed decisions about an issue as important as the quality and quantity of drinking water.

Certain segments of the population are more likely than others do well on the quiz. Notably, three subgroups are significantly more likely than average to get five or six answers correct: those who say they know a lot about the environment (32%); households with incomes of \$50,000 or more (30%); and college graduates (28%). In addition, men are more likely than women to get five or six statements correct (23% vs. 18%), while Americans age 34 to 44 are more apt to get five or six correct than those age 65 or over (24% vs. 15%). The "green" subgroups also do well, as do several of the "outdoor sports enthusiast" subgroups (downhill skiers, hunters, and golfers).

Top Performers on Water Knowledge Issues

Percent answering 5 or 6 correctly (of 6)

Total	20%
Know "a lot" about the environment	32
Household income \$50,000 and over	30
College graduate or more	28
Downhill skiers	26
Done volunteer work	25
Some college	25
Golfers	25
Hunters	25
Age 35-44	24
Male	23

Interestingly, those who correctly answered five or six statements are significantly more likely than those who answered two or fewer statements correctly to say they have volunteered on behalf of the environment in the past year or two (34% vs. 15%). Once again, the data support the idea that concern, education, and behavior are linked to one another.

From a different perspective, it is seen that the American public is more likely to know what is not true about water than what is true. The majority of Americans correctly answer the four "false" statements as incorrect, while the two "true" statements ("Only 1% of the world's water is fresh and available for use" and "No rivers or lakes in the United States are safe for drinking") are known to be correct by less than half of the population. This may be an indication that the information Americans receive about environmental issues like water is insufficient, evidence of a need for further education on the subject. As people become more knowledgeable, they become better prepared to make decisions about the issues that concern and affect their lives and the world around them.

Part Five

The Views of Outdoor Sports Enthusiasts

Throughout this report, various subgroups have been highlighted to give depth and focus to the national results. Five subgroups whose environmental attitudes and involvement sometimes stand out are collectively known as "outdoor sports enthusiasts." (The term is used throughout this part of the report to include both-genders.) The report now turns to this group as a whole, and the five subgroups with large enough samples to profile separately, namely anglers (freshwater and saltwater fishermen, 36%), hunters (13%), motor boaters (28%), downhill skiers (12%), and golfers (16%).

Who Are Outdoor Sports Enthusiasts?

Over half of the public, 52%, qualify as outdoor sports enthusiasts, having participated in one of five activities and hobbies in the past 12 months. As a group, they are somewhat younger than the total public, better educated than average and have a higher annual income than Americans in general. Demographically, downhill skiers are the youngest. Golfers and downhill skiers report the highest educational attainment, and also have the highest household income. While a majority of each outdoor sports enthusiast subgroup is male, females make up a third or more of downhill skiers, anglers, and motor boaters.

Demographics of Outdoor Sports Enthusiasts

	Total Public %	Outdoor Sports Enthusiasts %	Anglers %	Hunters %	Motor Boaters %	Downhill Skiers %	Golfers %
Age							
18-24	13	15	14	15	14	22	14
25-34	21	24	25	20	22	28	28
35-44	22	26	24	31	29	29	24
45-54	16	15	17	15	14	11	12
55-64	12	10	11	13	12	5	6
65 or older	16	9	8	6	9	2	14
Education							
High School Grad or less	58	50	56	63	48	30	34
Some College	18	19	18	15	22	22	22
College Grad or more	24	28	25	22	29	45	43
Income							
Under \$20,000	22	16	15	16	12	12	11
\$20,000 to \$29,000	16	15	18	20	15	13	8
\$30,000 to \$49,000	23	26	26	24	27	20	28
\$50,000 or more	24	31	27	27	34	44	41
Gender							
Male	48	59	63	85	60	67	74
Female	52	41	37	15	40	33	26

Outdoor Sports Enthusiasts' View of the Environment and the Economy

Among the general public, over six in 10 (63%) believe that there can be a balance between environmental protection and economic development. Outdoor sports enthusiasts express even greater belief in the sense of balance: 70% say the environment and the economy can go hand-in-hand. This is the one of the three significant differences between outdoor sports enthusiasts and the general public. Downhill skiers, at 74%, report the highest level of agreement with the idea of balance.

Otherwise, whether the issue is the interplay of the environment and the economy or the efficacy and impact of current laws and regulations to protect the environment, outdoor sports enthusiasts express attitudes similar to those held by the general population. When asked whether they favor economic development or environmental protection should a choice between the two be required, only golfers stand out, 32% of whom favor economic development, compared to 21% of the general public. When the issue is current environmental legislation, golfers (32%) and hunters (34%) are considerably less likely than the general population (45%) to argue that the laws on the books do not go far enough. Instead, hunters are the outdoor sports enthusiast subgroup most likely to say that current legislation goes too far (29%, vs. 19% for all Americans), while golfers are the outdoor sports enthusiast subgroup most likely to say current legislation already strikes the right balance needed to protect the environment (35%, vs. 28% for all Americans).

Examining a specific law created to protect the environment, the Endangered Species Act, which requires the federal government to take whatever steps are necessary to keep a species from becoming extinct, outdoor sports enthusiasts as a whole are about as likely as the general public to want the Endangered Species act to consider cost when deciding which species should be saved (63%, vs. 60% for all Americans). Only golfers (68%) and hunters (66%) stand out from the general public in their desire for the policy to consider cost. With regard to choosing between protecting the environment or protecting the rights of a property owner when these two elements come into conflict, only hunters differ significantly from the American public, as they are among the most likely to favor protecting the owner's rights. Thus, when asked to choose between protecting an endangered species of owl that lives on land owned by a logging company, 54% of hunters favor protecting the owl, compared to 64% of all Americans. Likewise, when asked to choose between protecting a wetland area that a broke landowner finds on his land or allowing the landowner to sell some property, 56% of hunters favor the property owner's rights, compared to 50% of the general public.

Outdoor Sports Enthusiasts' View of the Environment and the Economy

	Total Public %	Outdoor Sports Enthusiasts %	Anglers %	Hunters %	Motor Boaters %	Downhill Skiers %	Golfers %
Environmental Protection and Economic Development Can Go Hand-in-Hand	63	70	70	69	71	74	68
Must Choose Between the Environment and the Economy	26	24	26	27	23	20	25
If No Compromise is Possible:							
Favor Economic Development	21	21	20	21	20	16	32
Favor Environmental Protection	63	63	65	59	62	67	51
Environmental Laws and Regulations:							
Not Gone Far Enough	45	43	44	34	41	43	32
Struck the Right Balance	28	29	30	27	31	33	35
Gone Too Far	19	19	19	29	19	15	21
Endangered Species Act:							
Consider Cost	60	63	62	66	61	65	68
Save All Species	32	31	32	26	32	28	26
Broke Homeowner vs. Wetlands:							
Protect Environment	43	44	44	40	46	47	40
Owner's Rights	50	50	51	56	48	47	51
Logging Company vs. Endangered Species							
Protect Environment	64	61	61	54	59	64	57
Owner's Rights	30	32	33	40	34	30	35

Environmental Involvement and Knowledge among Outdoor Sports Enthusiasts

Given their belief in the idea that environmental protection and economic development can go hand-in-hand, it should not be surprising that like most Americans, outdoor sports enthusiasts view the environment from a perspective that favors conservation (protecting wildlife, natural areas, and natural resources by managing those resources while also using them for the benefit of the economy and the public), rather than preservation (protecting wildlife, natural areas, and natural resources by preventing development and restricting most other human activity in those areas). However, two outdoor sports enthusiast subgroups do differ greatly from the general public: hunters are especially supportive of the conservationist point of view (80% vs. 71% of all Americans), while downhill skiers are less likely than most Americans to support the conservationist perspective (66%).

Interestingly, though they probably spend more time outside than Americans in general, outdoor sports enthusiasts are only marginally more likely to consider themselves "active environmentalists," 24% vs. 21% of Americans overall. About half of each subgroup (as among the general public) say they are "sympathetic toward environmental concerns, but not active."

This is not to say that outdoor sports enthusiasts avoid involvement in the environment. In fact, outdoor sports enthusiasts are more likely than the general public to say they have volunteered on behalf of the environment in the past year or two. This is the second key manner by which outdoor sports enthusiasts differentiate themselves from the general public, as one-third or more of each of the outdoor sports enthusiasts subgroups report involvement in activities that benefit the environment, compared to about one-quarter of Americans overall (27%). Hunters (39%) are the outdoor sports enthusiast subgroup most likely to say they have done "green" volunteer work. When viewed over a four-year period, hunters are 14 percentage points more likely in 1996 than in 1993 to say they have volunteered to help the environment; involvement among golfers is up 16 percentage points to 36%, while involvement among motor boaters is up 10 percentage points to 36%.

The third key difference between outdoor sports enthusiasts and the general public is self-reported knowledge of environmental issues and problems. Whereas 62% of the general public feels it knows either "a lot" (9%) or "a fair amount" (53%) about the environment, 68% of outdoor sports enthusiasts rate their environmental knowledge as either "a lot" (11%) or "a fair amount" (57%). Among the outdoor sports enthusiast subgroups, hunters (75%) and downhill skiers (74%) report the highest level of environmental knowledge and anglers the least (67%), though anglers' self-reported environmental knowledge is still five percentage points higher than that of the general population.

However, this higher level of environmental knowledge among outdoor sports enthusiasts as a group does not extend to the quiz about water knowledge, for which 20% of all Americans and 21% of outdoor sports enthusiasts identify the correct answer for five or six of the six statements about water. Downhill skiers (26%), hunters (25%) and golfers (25%) do better than the national average on the water knowledge quiz, while anglers fare slightly worse (18%).

Environmental Involvement and Knowledge among Outdoor Sports Enthusiasts

	Total Public %	Outdoor Sports Enthusiasts %	Anglers %	Hunters %	Motor Boaters %	Downhill Skiers %	Golfers %
Conservationists	71	73	74	80	74	66	74
Preservationists	25	25	25	19	24	32	24
Active Environmentalists	21	24	22	24	25	24	16
Green Volunteers	27	34	33	39	36	37	36
Environmental Knowledge							
A Lot / A Fair Amount	62	68	67	75	72	74	71
Only a Little / Practically Nothing	37	32	33	26	28	25	28
Water Knowledge Quiz							
5 or 6 (of 6)	20	21	18	25	21	26	25
3 or 4 (of 6)	56	58	61	54	58	57	55
0 or 1 or 2 (of 6)	24	20	21	20	22	17	20

Although outdoor sports enthusiasts are largely like Americans as a whole, they stand out in three key areas. First, outdoor sports enthusiasts are more likely than the general public to believe that a balance can be achieved between the environment and the economy. Second, they are more likely to say they have volunteered on behalf of the environment in the past year or two. Third, they report a higher level of knowledge about environmental issues and problems. In other words, outdoor sports enthusiasts are clearly among the leaders in the nation when it comes to environmental attitudes and knowledge, and a group to be watched for future trends in environmental opinion and involvement.

Conclusion

This, the fifth in a series of annual Roper Starch surveys on the environmental attitudes and knowledge of adults, tells us some important things about the future of environmental policy and education in America. It also permits a look at how the public's attitudes have changed over the last five years.

This study makes it clear that Americans are concerned about the environment and the majority is willing to support increased government action and spending to protect and conserve the environment. Americans do not, however, wish to see regulation at the undue expense of private property rights. Over the last five years, the measures showing the greatest change focus on attitudes toward environmental legislation. The percentage of Americans saying that environmental laws and regulations "have not gone far enough" dropped 20 points from 1992 to 1995, before rebounding slightly in 1996. At the same time, those saying laws and regulations have "struck about the right balance" climbed 11 points from 1992 to 1996. Additionally, agreement that the Endangered Species Act should consider cost is 10 percentage points higher now than in 1992.

General attitudes toward the environment, meanwhile, have been fairly steady over the last five years. For example, the vast majority of the public continue to be optimistic about the potential to balance environmental protection and economic development, with scores at the same level in 1996 as they were in 1992. Similarly, Americans are just as likely in 1996 as in 1992 to say that environmental protection and economic development can go "hand in hand." Additionally, the percentage of Americans considering themselves "Conservationists" or "Preservationists" has been stable. However, though we are more than halfway through the decade, about half of the American public agrees that the 1990s is the last decade in which we can act to avoid a major environmental catastrophe.

Despite high levels of concern, there appears to be a "gap" between environmental concern and actual knowledge. Though every American is affected by the environment with respect to their health, their community, their family, and the economy, only 9% of Americans say they know "a lot" about the environment, though an additional 53% do say they know "a fair amount." Moreover, of six true/false questions about water conservation and water protection, just 3% of those surveyed accurately answered all six items; only 54% know for certain that the ocean (made up of salt water) is not a direct source of drinking water for one-quarter of the people in this country.

A gap also exists between Americans' concern about the environment and their involvement in environmental activities. Overall, about one-quarter of the population have volunteered on behalf of the environment. Only a select few subgroups report higher levels of environmental involvement.

Thus, the key to interpreting Americans' environmental attitudes and behavior is knowledge, and one of the best ways to increase knowledge is through education. Expanding opportunities for environmental education will give direction to Americans' understanding of the environment, the continuing need for its protection, and inform them of opportunities for involvement.

Methodology

Description of the Sample

A nationwide cross-section of 1,004 adults, 18 years of age and older, was interviewed in the National Environmental Education and Training Foundation Environmental Attitudes and Knowledge survey. Interviews were conducted by telephone May 1 to May 13, 1996. Results are projectable to the total adult population of the continental United States who would be willing to be interviewed in a telephone study of this kind.

The margin of error due to sampling is plus or minus three percentage points at the .95 confidence level, although it is larger for the results for smaller subgroups of the public. For example, the sampling error is plus or minus seven percentage points for results among the 339 adults in the sample aged 18-34. When comparing results of the 1996 study to earlier waves of this study (known as the Times Mirror Magazines National Environmental Forum from 1992 to 1995), the margin of sampling error is plus or minus three percentage points.

Sampling Method

The basic sample was drawn at random from the adult population of the continental United States, excluding institutionalized segments of the public (such as those in Army camps, nursing homes, and prisons).

Households contacted for the survey were selected at random by a procedure known as random digit dialing, which insures that households with unlisted telephone numbers, as well as those with listed numbers, are included in the sample.

All interviews were conducted during evening hours on weekdays and all day on weekends to ensure that both working as well as non-working segments of the population would be included.

Weighting Procedure

The demographic characteristics of the random sample were compared with the most recent Census Bureau estimates and corrective weights were applied to ensure proper representation based on age, sex, and educational attainment.

Percentages Not Totaling 100%

Responses were computerized and rounded off to the nearest whole percentage. As a result, percentages in certain charts and columns may sometimes total slightly more or less than 100%. Also, in certain charts and analyses, the results of those who said "don't know" or chose not to answer may have been omitted.

Appendix

Five Year Trend: A Summary of Changes and Attitudes Over Time

	Total Public 1992 %	Total Public 1996 %
<i>Changed Over the Last Five Years:</i>		
Environmental Laws and Regulations: Not Gone Far Enough	63	45
Struck the Right Balance	17	28
Gone Too Far	10	19
Environmental Laws and Regulations: Not Gone Far Enough, For:		
Water Pollution	79	73
Air Pollution	72	64
Wild and Natural Areas	59	50
Wetlands	53	47
Endangered Species	51	44
Compensation for land devalued by environmental regulations	66	72
Active environmentalists	29	21
Endangered Species Act should consider cost	50	60
Broke Homeowner vs. Wetlands: Protect Environment	48	43
Owner's Rights	40	50
Logging Company vs. Endangered Species: Protect Environment	68	64
Owner's Rights	23	30
<i>Stayed the Same Over the Last Five Years:</i>		
Environmental Protection and Economic Development Can Go Hand-in-Hand	63	63
Must Choose Between the Environment and the Economy	25	26
If No Compromise is Possible: Favor Economic Development	17	21
Favor Environmental Protection	64	63
Outlook: Conservationist	70	71
Preservationist	26	25
Agreement with Phrase: The 1990s is the last decade when humans will have a chance to save the earth from environmental catastrophe	49	48
Technology will find a way of solving environmental problems	58	62

The Environmental Gender Gap

	Males %	Females %
If No Compromise is Possible Between Environmental Protection and Economic Development:		
Favor Economic Development	25	17
Favor Environmental Protection	58	69
Environmental Laws and Regulations: Not Gone Far Enough	38	51
Struck the Right Balance	29	26
Gone Too Far	23	14
Environmental Laws and Regulations: Not Gone Far Enough, For:		
Water Pollution	68	78
Air Pollution	58	71
Wild and Natural Areas	47	53
Wetlands	45	49
Endangered Species	39	49
Active Environmentalists	18	24
Green Volunteers	30	24
Broke Homeowner vs. Wetlands: Protect Environment	41	45
Owner's Rights	53	47
Logging Company vs. Endangered Species: Protect Environment	59	67
Owner's Rights	35	25
Environmental Knowledge: A lot / A Fair Amount	68	57
Only a Little / Practically Nothing	31	43
Agreement with Phrase: The 1990s is the last decade when humans will have a chance to save the earth from environmental catastrophe	46	50
Technology will find a way of solving environmental problems	65	58
Willing to Pay Extra for Pollution-Reducing Gasoline	68	82

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